# **CHIRP GA FEEDBACK**

# Issue No: 54

# **CLOSE ENCOUNTER WITH 'HELIMED'**

**Report Text:** 'Helimed ##A' called the AAA Air/Ground operator intending to cross the ATZ at 1,000ft. The AAA A/G operator advised local QNH and that the Right Hand circuit was active. I was flying circuits with a student. Several aircraft were in the circuit and local area.

Some minutes later, we turned from cross-wind to downwind at 700 ft QFE (1000 ft QNH), and observed the Helimed helicopter on a southerly converging track and at the same height. Almost simultaneously the helicopter pilot reported visual with the circuit traffic but took no avoiding action on us. We turned left to remain clear and the helicopter passed down our right side.

Shortly after, the helicopter pilot reported overhead AAA and a little later reported changing to an en route frequency. I advised AAA Air/Ground of my intention to file a report.

After landing I learned that ### Radar had phoned AAA to inform them of the flight, but that this information was given as (or was interpreted as) a flight at 1,500 ft.

Subsequently, before deciding whether to file a report I contacted the helicopter pilot to raise my concerns and to understand the situation from the helicopter pilot's standpoint. The helicopter pilot commented that he was operating with an 'Alpha' callsign, which afforded him priority over other traffic, and asked me if I was aware of this. I replied that I was not aware and asked where the information could be found; he suggested it might be in JAR-OPS or the HEMS website. The pilot advised me that he had informed ### Radar and had been visual with my aircraft throughout. We discussed my concerns that the helicopter had flown through the visual circuit of a busy training airfield, where pilots of a range of abilities fly, at the circuit height when the airfield had been advised that it would transit at 1,500ft. Also, that no avoiding action appeared to have been taken. At the conclusion of our discussion, the helicopter pilot apologised if he had caused concern or discomfort and agreed that he would be more careful transiting training airfields and would warn his colleagues similarly.

Lessons Learned: None of us would knowingly impede the vital work of the air ambulance, and I recognise the urgency of the situation and the pilot's work-load which that doubtless creates. Nonetheless there are several lessons to be learnt:

1. The full meaning of an Alpha call sign is unclear. There is no mention of it in CAP413; I could find nothing in JAR OPS, and I am only aware that it accords tactical priority to aircraft which are operating under an ATC service. The helicopter pilot appeared to believe that it accorded greater significance in terms of priority.

2. It is poor airmanship to transit an ATZ at circuit height. Transiting at 1,500 feet would have afforded a

safety margin relative to the circuit height at this or neighbouring airfields. Good lookout by both the helicopter pilot and me, aided by the helicopter's conspicuity lighting averted a more serious incident.

3. Whilst recognising that neither a pilot nor air-ground operator can issue instructions, the Air/Ground operator, ### Radar and I were all in a position to advise Helimed ##A that he was transiting at circuit altitude. In case of doubt about another aircraft's position or intention, we all have the right and duty to offer or request clarifying information.

*CHIRP* Comment: The policy for the application of callsigns to helicopter emergency medical (HEMS) flights is set out in Aeronautical Information Circular No. 96/2008 (Yellow 277) [Available at: <u>www.ais.org.uk</u>]

HEMS R/T callsigns comprise three elements: the first two are the callsign 'Helimed' and a two-digit aircraft identifier.

The third element is the suffix 'Alpha'; this is used when an Air Ambulance is performing an emergency operational task and affords the helicopter the highest priority by ATC against <u>all</u> other traffic. The suffix 'Alpha' is not used on routine operational, training or other flights.

Although the Rules of the Air do not explicitly afford a 'Helimed ## Alpha' any priority except as provided under an ATC service, the vital role of HEMS operations should be regarded in the same way as an ambulance displaying blue lights/sirens by affording an 'Alpha' flight right-of-way/priority whenever possible.

#### **VHF** INTERFERENCE

**Report Text:** Hopefully in recounting this story others can avoid the highly embarrassing and potentially dangerous situation that befell our aircraft.

A small group of us own a microlight. We maintain our aircraft to a high standard and take pride in operating it as carefully and responsibly as possible. We are used to the radio and intercom operating correctly and we always get 'Readability 5' and are always able to clearly receive transmissions.

When carrying out power checks ready for a crosscountry flight a repetitive warbling sound became audible from the intercom and the GPS was unable to gain a lock. The engine was stopped but an investigation was unable to determine the source of the sound. The flight continued with the radio reception problem which came and went throughout the flight. A week later the plane was flown again and the same problem occurred. A more extensive investigation was still unable to determine the cause of the problem.

A week later two of us resolved to solve the mystery once and for all. After isolating every circuit in the plane

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including using a hand-held radio and disconnecting the main battery the interference could still be heard. At this point we were stumped until a fellow pilot came over to see what we were up to. Upon explaining that we had an interfering radio signal coming from the plane but that there were no connected power sources he looked into the back of the plane and said "what is this"? He was pointing at the Emergency Locator Transmitter (ELT) mounted in a bracket behind the seat. Looking at it, to my horror I could see that the trigger pin was half hanging out! Pushing it back in the interference stopped immediately. The plastic clip holding the trigger in place had broken off and placing baggage in the back of the plane had dislodged it.

Lessons Learned: We have learned some important lessons from this:

1. Sometimes having someone else who is not connected with the problem/aircraft can be very helpful in diagnosing what is wrong. They often look at the problem in a completely different way.

2. Add inspection of your ELT to your checklist so that you make sure that it isn't accidentally transmitting.

*CHIRP* Comment: When fitting an ELT or any emergency equipment consider the risk of accidental damage/inadvertent operation.

Routinely completing a simple Pre-flight checklist containing all important items before every flight will avoid this and many other potential embarrassments.

# **A CONTESTED DEPARTURE**

**Report Text:** I had planned to depart ZZZ before the published opening time of the airfield to avoid heavy inbound traffic due to a scheduled fly-in. I had been checked out and authorised to operate out of hours for several years. I also had a young non-pilot aviation enthusiast passenger with me, who appeared somewhat nervous.

The general procedure for operating out of hours is to make calls to 'ZZZ Traffic', and this is what I had intended to do. However, as my planned departure was close to the time of opening and knowing the dedication of the FISOs, I took a guess that they would be already in the tower, so I made my initial call to 'ZZZ Information'. I got a response with a radio check and clearance to taxi to the holding point for the easterly runway.

I was slightly surprised during taxiing to hear other aircraft already on frequency and inbound presumably for the fly-in, and pointed out the other aircraft on approach to my passenger. I completed power checks at the holding point, and radio'd 'G-#### ready for departure'. After a pause I recall a response giving me the wind speed and direction and what I assumed was a take off at your discretion. I acknowledged with 'G-##'. Mindful of the inbound aircraft I proceeded to line up and depart.

After my departure I received a call from ZZZ Information asking for a radio check, I responded with 'Reading you strength 5', the unexpected response back was 'Upon your return please report to the Tower'. As every pilot knows, this kind of response means that you have done something wrong, although at the time I could not think what I had done. I completed the rest of the flight to my destination (Southeast England) through some very congested airspace feeling very stressed and distracted, and preoccupied with reviewing my actions at ZZZ. I cut short my visit, anxious to get back to ZZZ and speak to the FISO to find out what error I had made. The flight back to ZZZ was eventful. I was again distracted and unable to focus on anything but thinking about what I had done wrong at ZZZ that morning. After landing and securing the aircraft I went to the tower to speak to the FISO. He asked me if I remembered if he had indicated to me that I could depart that morning. I replied that I believed that he HAD allowed me to proceed past the holding point and to depart, I believed that he had given me an 'at your The FISO responded that he couldn't discretion'. remember doing that but he wasn't certain. He had assumed that he had not allowed me to depart as he had not moved his 'strip' to a different section of his control board, but he couldn't actually remember either way, as he had been very busy preparing for the day. I also could not remember the FISO's response, although I do remember him telling me the wind, as it was moderate and right across the runway, and I had commented to my passenger that it may feel a bit bumpy after take off. The FISO gave me the benefit of the doubt and told me to disregard the conversation - no harm done

Subsequently I asked my passenger if he remembered the radio transmissions before take off and if he recalled the FISO's response to my call at the holding point. My passenger remembered the response as 'Wind is X at Y, nothing known to affect you'.

Lessons Learned:

1. As I had indicated that I was ready for departure, if the FISO did not want me to proceed it would have been more appropriate if I had simply been instructed to hold position. A response was definitely given to me when I reported, "Ready for departure" but no one involved can remember what the response was.

2. I should not have proceeded to cross the holding point unless I was sure that I had been told that I could do so.

3. I should have given a more definite radio response other than 'G-##', by responding with "Lining up" and later "Departing", either of these transmissions would have given the FISO a prompt as to exactly where I was and even if he had been distracted he would not have been 'surprised' to see me take off.

4. A good pilot should not allow himself/herself to be distracted by something which is in the past and cannot be dealt with at the time. I allowed myself to be distracted by the "Report to the tower upon your return" message for the entire flight, and flew in an erratic and distracted manner. Perhaps I should have returned to ZZZ immediately, or questioned the FISO as to the nature of the problem over the radio; this may have reduced the mental distraction

Faults on both sides I believe; lessons learnt and no harm done.

CHIRP Comment: This report highlights two important points:

The first is that, when operating under an ATC or aerodrome FIS, never enter a runway unless you are sure that you have been cleared to do so and the runway/final approach is clear. If in doubt, reconfirm.

The second is that NATS has actively promoted the principle among the ATCO population not to issue any form of admonition over the R/T to a pilot irrespective of his/her experience to avoid causing a distraction such as that described. This is an equally important message for FISOs and also for cases where Air/Ground operators are requested to pass on instructions from the airfield operator.

#### LOSS OF SITUATIONAL AWARENESS

**Report Text:** I was returning to XXX. Before requesting joining information I monitored the frequency for about 30 seconds and could hear that there were 6 or 7 other inbound aircraft, some closer and some further out than me, approaching from all directions. On contacting XXX Information, I was asked to report downwind right-hand. This is fairly standard procedure at XXX, with light GA and visiting aircraft joining right-hand downwind, whilst commercial and heavier types join left-hand downwind.

I reported downwind and was told that I was number two to traffic currently on a left-hand downwind, and to report 'Final'. From listening to the R/T I could tell that this traffic was a formation of two aircraft that was positioning for a 'run and break' manoeuvre. I could hear several other aircraft behind me in the circuit, although I was entirely focussed on trying to get a visual with the formation as my perception was that this could conflict with me and was more important than the circuit traffic behind me. I would need to sight the formation traffic and time my turns to base and final so as not to conflict and also so as not to cut in front of them, I could also not extend too far on the downwind leg as I would then run the risk of traffic behind me cutting in.

I was at a mid point on my base leg still without a visual on the formation traffic when an aircraft in the circuit behind me started transmitting a heavily accented and panicky sounding message. I could not understand what the pilot was transmitting due to the heavy accent, but I could hear someone else shouting in clearer English in the background. The FISO responded by asking if the pilot wanted to use the opposite direction runway, so I assumed it was some kind of emergency. There was another unintelligible transmission from the aircraft again with someone shouting in the background 'Short circuit; Short Circuit'.

The FISO broadcast to all aircraft to 'Give way to emergency aircraft'. By this time I was at the end of my right base leg ready to turn final, still not visual with the left base traffic and no idea whereabouts in the circuit the emergency aircraft was. I had several options:

1. Continue on my current heading and possibly come into head-on conflict with the traffic which might be on left base.

2. Turn left and fly the wrong way up the approach path possibly coming in to conflict with any aircraft on straight in approach or possibly the emergency aircraft if they were wider in the circuit than me.

3. Turn on to a final and climb. Again possibly bringing me in to conflict with the emergency aircraft if it was tighter in the circuit than me or above me, and possibly also the formation which may be ahead of me.

I know that pilots are responsible for their own separation whilst receiving a service from a FISO, but I felt at the time that my only option was to assume the FISO might know the position of the other aircraft. Aware I was running out of time to make a decision I transmitted my position and asked 'What do you want me to do?'; a non-standard and ambiguous transmission which elicited a similarly unhelpful response 'Give way to the emergency aircraft' (the position of which I had no idea). I elected to turn on to final and climb. As I applied power to begin the climb the engine faltered, power actually reduced and took 3 or 4 seconds to pick up. I had opened the throttle too quickly and had to increase my rate of descent to avoid stalling. The engine cleared and I began the climb only to notice the emergency aircraft turn hard in front of me at about 500m range they must have been on a tighter base leg than me, above and slightly behind. I climbed out through the overhead and flew a holding pattern some 5 miles away until the runway was re-opened.

The rest of the approach was uneventful. I was quite scared during this event, as I knew there were other aircraft around me and that I was expected to give way to them, but I had no idea of where they were in relation to me, and knew that I had only moments to make the correct decision.

Lessons Learned:

1. In a busy circuit you must try and maintain situational awareness of all aircraft in the circuit, not just the ones in front of you.

2. I am known for remaining calm, however I let the panic in the voice of the emergency aircraft's pilot affect me and became flustered when the unexpected happened. A pilot should always expect the unexpected.

4. Remember Aviate - Navigate - Communicate. Don't push the throttle forward so quickly that the engine falters; I would have entered the climb quicker by feeding the power in gently. At the time I was more concerned with looking for the other aircraft and kicking myself for my appalling R/T.

5. Use correct R/T. Ask what you need to know.

6. When using both left and right hand circuits it would be helpful for situational awareness to require aircraft to report on base leg as well as final. Also, if there is a broadcast to give way to an emergency aircraft, it would be useful to be told the aircraft's position.

CHIRP Comment: What would you have done in the situation described?

It is important to remember that FISOs (and Air/Ground operators) receive no training on issuing instructions to aircraft in flight and that you are ultimately responsible for the safety of your aircraft.

In electing to turn onto the base leg without having established visual contact with the opposite direction formation, the reporter contributed to his subsequent difficulties; the appropriate course of action would have been to clear the circuit from the downwind leg if uncertain of the position of the formation. Also, as the reporter notes, when placed under stress, the absolute priority is to fly accurately and ensure that your throttle handling remains appropriate for your engine type.

#### TAFS & METAR WINDS

**Report Text:** As a private pilot with 20 years experience in light aircraft, I read the item "METARs - Wind Reporting" published in Issue 103 of Air Transport FEEDBACK (Page 7) with great interest.

This is something you may wish to find a way of promulgating to the wider GA pilot community. In 20 years I NEVER knew or recall having been told that winds in METAR and TAF were true winds. I have always read them as magnetic on the airfield in question.

I fly a lot in Eastern Europe where the magnetic variation, as in the UK, is not that significant. However, I fly a large tail-dragger and when I see 20 kts 10 degrees off the runway, I know I can land diagonally in a very short distance - I am lucky my aeroplane will land in under 50 yards. A Tiger Moth for instance would have more of an issue if the wind was actually 20 degrees off of the runway, when believing it to be only 10 degrees.

There is NO excuse for not checking a windsock on approach or overhead, but for planning this could be quite an important issue.

*CHIRP* Comment: The following information has been provided courtesy of the UK Meteorological Authority:

All METARs (and wind information in a TAF) are provided in Degrees True North, whereas all reports provided by ATC, including those on ATIS (Automatic Terminal Information Service), are provided in Degrees Magnetic North.

The World Meteorological Organisation (WMO) an agency of the United Nations in conjunction with ICAO set the standards by which meteorological observations are made. All observations that are used by meteorologists are provided in relation to Degrees True North; in many States the observation system that is used to provide the routine weather observations is also used to provide the METAR. There have been a number of discussions within ICAO on the relative merits of Degrees True vs Degrees Magnetic. However such a change would require modifications to wind reporting systems around the world, many of which are fully automated.

Work is in progress to develop a system that will allow users much greater flexibility in the format of weather information they receive; rather than just being able to receive coded weather reports as at present the user will in the future have a number of options including Degrees True or Degrees Magnetic. However, the introduction of such a system is several years away.

### CAP797 - FLIGHT INFORMATION SERVICE OFFICER MANUAL

The CAA is to publish the new Flight Information Service Officer Manual on the CAA website by the end of December 2012 with an effective date of introduction of 1 April 2013. When effective, this manual will replace CAP 410 - Manual of Flight Information Services.

#### **POOR CIRCUIT DISCIPLINE - FLY-IN**

**Report Text:** A friend, who was flying the inbound leg, and I arrived at a fly-in event. We had booked a slot and read up the arrival procedure. For the easterly runway direction in use, this involved approaching from a VRP to the west, orbiting there if necessary above 1,500 ft for separation, and then positioning to a left base for the grass runway. There was a hard runway to the left of the grass runway.

At the VRP we noted various aircraft, one entering the hold and two ahead of us proceeding in to the airfield, all above the 1,500ft minimum level as instructed. As we appeared to be well separated we proceeded to a left base.

At this point I noticed an aircraft very low a few miles ahead manoeuvring but possibly turning from a right downwind leg to right base. Given the clear instructions to join from the VRP, we didn't consider this a threat and concentrated on keeping a sensible separation from the aircraft we were following in. However, on turning final for the grass at 500 ft or so, I saw a C182 about 150m away, maybe 100 ft below, in our 3 o'clock turning across our path slightly behind us from right base onto final for the hard runway. As that aircraft was slightly faster than us we both ended up landing parallel (contemporaneously), contrary to instructions.

Lessons Learned: Maybe the first lesson is not to trust other pilots to be diligent or polite, or even legal. (Turning right within an ATZ where the notified circuit direction is left). Some are but others clearly aren't.

The second is what on earth we could have done to ensure a safe separation after first noting the traffic. We could have kept an eye on him but maintaining separation from the aircraft we were following seemed the more pertinent issue. And if we had seen him on right base, flying towards us but a bit further out, how could we know what he was planning to do? To keep the frequency usable we had been asked to make no calls before final. It is not surprising that a high percentage of midair collisions occur within ATZs.

*CHIRP* Comment: There is no excuse for not reviewing the joining instructions associated with a busy fly-in as part of the pre-flight preparations; however, a number of other pilots arriving at this event were similarly unaware of the correct arrival/joining procedure.

This incident, as described, could have been the subject of an Airprox Report [See: <u>www.airproxboard.org.uk/</u>]; this would have led to the pilot(s) of the C182 being interviewed.

The reporter and his colleague were placed in a difficult situation on the final approach; however, as the airfield procedures required the hard and grass runways to be regarded as a single runway, the reporter's colleague should have carried out a go-around and rejoined the hold. Remember, always be prepared for the unexpected and plan accordingly.

# **ANYTHING TO REPORT?**

If you would like to submit a report to CHIRP, you can do so by submitting an electronic report via our secure website <u>www.chirp.co.uk</u> or download a report form from our website and post/fax it to us (see P1 for our contact details).